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EXAMINER

OHERN, BRENT T

ART UNIT

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05/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/563,553	Applicant(s) RAJABALI ET AL.	
	Examiner BRENT T. OHERN	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6-13 and 15-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-13 and 15-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims

1. Claims 1-3, 6-12, 15-19 are pending.

WITHDRAWN REJECTIONS

2. The 35 U.S.C. 102(b) rejections of claims 1-3, 6-12 and 15-19 as being anticipated by Westre et al. (US 5,866,272) of record in the Office Action mailed 11 October 2007, page 2, paragraph 5 have been withdrawn due to Applicant's amendments in the Paper filed 11 April 2008.

NEW OBJECTIONS

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the Specification does not have textual support for "bent twice in opposite directions to form a z-shape" in claims 1 and 17, lines 5-8 of both claims. Furthermore, there is not textual support for "ends" when "edges" was replaced by "ends" throughout the claims per the latest amendment. If Applicant intends to keep said language in the claims then Applicant is advised to amend the Specification while being careful not to add new matter.

NEW REJECTIONS

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-3, 6-12, 15-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the **written description** requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The original disclosure does not have support for “bent twice in opposite directions to form a z-shape” in claims 1 and 17, lines 5-8 of both claims, thus, said language is **new matter**. A z-shape is interpreted as having two parallel segments connected by a third segment with the third segment intersecting the parallel segments at an angle less than 90 degrees. The original disclosure does not mention z-shaped and the intersecting angles in the figures is greater than 90 degrees.

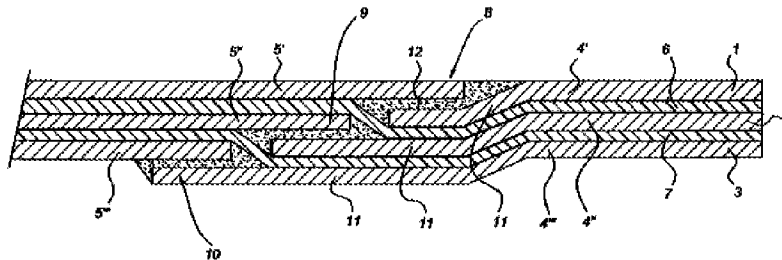
Claim Rejections - 35 USC § 102

5. Claims 1-3, 6-7, 9, 11-12 and 15-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Roebroeks (WO 02/078950 A1).

Regarding claim 1, Roebroeks ('950) teaches a laminate of alternating metal layers and at least one plastic bonding layer (*See p. 2, ll. 7-11 and FIG, alternating metal layers 1-3, 5', 5'', 5'''*, plastic layers 6-7 and plastic bonding glue layer #12.), each of the metal layers comprising two metal layer sections that have mutually overlapping ends whose opposing surfaces are bonded to one another, one of the mutually overlapping ends being bent twice in opposite directions to form a z-shape so that the

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two metal layer sections are extensions of one another (*See FIG where the metal layers overlap and layers 1 and 3 bent twice in the form of a z-shape.*), and



a fill having a thickness at least such that at the location of the fill the laminate has a thickness equal to a total thickness of the mutually overlapping ends of the metal layer sections and the at least one plastic bonding layer (*See FIG where the other metal layers and glue #12 are fills with a constant thickness in the middle region.*).

Regarding claims 2-3 and 12, Roebroeks ('950) teaches a laminate wherein the fill is on at least one/(two) side(s) of two of the mutually overlapping ends (*See FIG, where the fill is on both sides of the ends.*).

Regarding claim 6, Roebroeks ('950) teaches a laminate wherein the laminate has a region in which there is at least one fill and a second region without the fill (*See FIG where the fill is in some regions and not in the other regions.*).

Regarding claim 7, Roebroeks ('950) teaches a laminate wherein the fill comprises at least one metal layer and at least one plastic bonding layer (*See FIG, metal layers and the additional plastic bonding layers #12.*).

Regarding claim 9, Roebroeks ('950) teaches a laminate wherein the plastic bonding layer comprises a layer of adhesive (*See FIG adhesive of #12.*).

Regarding claim 11, Roebroeks ('950) teaches a laminate wherein the fill is interlaminar (*See FIG.*).

Regarding claim 15, Roebroeks ('950) teaches wherein outside of the mutually overlapping ends, each respective one of the metal layers is at a respective same level (*See FIG wherein the layers are at the same level.*).

Regarding claim 16, Roebroeks ('950) teaches wherein the second region has a smaller thickness than said first region (*See FIG wherein the regions have different thickness.*).

Regarding claim 17, Roebroeks ('950) teaches a laminate comprising: plural metal layers that each comprise two metal layer sections that have, in a first region, overlapping ends whose opposing surfaces bonded to one another, one of the overlapping ends being bent twice in opposite directions to form a z-shape and being at a level of an adjacent one of the plural metal layers (*See p. 2, ll. 7-11 and FIG, alternating metal layers 1-3, 5', 5'', 5''' , plastic layers 6-7 and plastic bonding glue layer #12 where the metal layers overlap and layers 1 and 3 bent twice in the form of a z-shape.*), wherein in a second region separate from the first region the two metal layer sections are at a same level of the laminate (*See FIG wherein the layers are at the same level.*); and a fill between an adjacent pair of the plural metal layers in the second region, the fill having a thickness so that the laminate has a same thickness in the first and second regions (*See FIG, metal layers and the additional plastic bonding layers #12.*).

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Regarding claim 18, Roebroeks ('950) teaches further comprising respective bonding layers between adjoining ones of the plural metal layers and between the fill and adjoining ones of the plural metal layers (*See FIG, bonding layers bonding the metal layers.*).

Regarding claim 19, Roebroeks ('950) teaches wherein the fill is metal (*See FIG, where the additional fill layers 1-3, 5', 5'' and 5''' are metal.*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roebroeks (WO 02/078950 A1).

Roebroeks ('950) teaches the laminate discussed above, however, fails to expressly disclose wherein the fill comprises at least a further metal layer with a thickness greater than that of the metal layers.

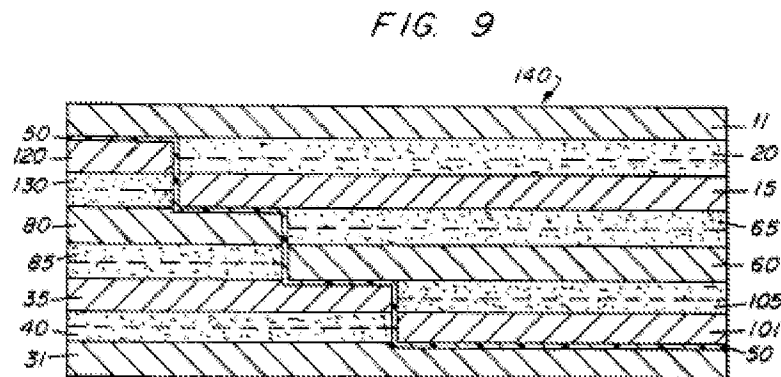
However, it would have been obvious to a person having ordinary skill in the art at the time Applicant's invention was made to provide a structure having layers with variable thickness, depending on the end use requirements for reasons such as support or uniform inner or outer surface profiles.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time Applicant's invention was made to provide some metal layers that are thicker than other layers.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roebroeks (WO 02/078950 A1) in view of Lambing (US 5,160,771).

Roebroeks ('950) teaches the laminate discussed above, however, fails to expressly disclose wherein the plastic bonding layer comprises a fibre layer that has been impregnated with an adhesive.

However, Lambing ('771) teaches a laminate wherein the plastic bonding layer comprises a fibre layer that has been impregnated with an adhesive (*See col. 5, ll. 34-37, col. 3, l. 36 and FIGs 9 and 3, #50.*) for the purpose of providing a structure having high tensile strength (*See col. 2, ll. 29-33.*).



Therefore, it would have been obvious to a person having ordinary skill in the art at the time Applicant's invention was made to substitute Roebroeks' ('950) plastic layer with the above fibre plastic layer in order to provide a structure that has high tensile strength.

ANSWERS TO APPLICANT'S ARGUMENTS

8. In response to Applicant's arguments (*p. 5, para. 3 of Applicant's Paper filed 11 April 2008*) that Westre et al. (US 5,866,272) does not teach the amended claims, it is noted that Westre ('272) is no longer cited as teaching any of the pending claims, thus, Applicant's arguments are moot.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRENT T. OHERN whose telephone number is (571)272-0496. The examiner can normally be reached on Monday, Tuesday and Thursday, 9:00-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brent T O'Hern/
Examiner, Art Unit 1794
May 12, 2008

/Elizabeth M. Cole/
Primary Examiner, Art Unit 1794